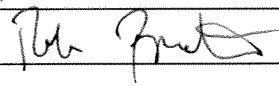


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PTO/SB/33 (08-08)

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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
<p>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]</p> <p>on <u>May 7, 2009</u></p> <p>Signature <u></u></p> <p>Typed or printed name <u>Rob Brownstein</u></p>		Application Number	Filed
		10/774,813	February 9, 2004
		First Named Inventor	
		Shlomo Ovadia	
Art Unit		Examiner	
2439		Canh Le	
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. <u>50, 296</u> Registration number</p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>			
<p><input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.</p>			

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I hereby certify that this correspondence is being submitted electronically via EFS-Web on the date shown below.

May 7, 2009

*date*

*Patent*

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) Examiner: Canh Le  
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) Art Unit: 2439  
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) Confirmation No.: 9229  
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**SUBMISSION FOR PRE-APPEAL BRIEF REQUEST FOR REVIEW**  
**1296 O.G. 67 (July 12, 2005)**

Pursuant to the USPTO Pre-Appeal Brief Conference pilot program established by 1296 O.G. 67 (July 12, 2005), Applicants hereby requests a pre-appeal brief review of the claim rejections in the final Office Action mailed March 18, 2009 for the above-noted patent application. The Examiner is respectfully solicited to consider the following remarks.

## REMARKS

Claims 19-27 remain pending in the instant application and claims 1-18 remain withdrawn by the Examiner. Claims 19-27 presently stand rejected. Reconsideration of the pending claims are respectfully requested.

### A. Independent Claim 19 is Nonobvious Over Qiao and Biggs

Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Chunming Qiao, Optical Networking Solutions for next-generation Internet networks. "Label Optical Burst Switching for IP-over-WDM Intergration", IEEE Communication Magazine, September 2000, pg. 104-114 in view of Biggs et al. (US 2004/0236946 A1).

"To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. All words in a claim must be considered in judging the patentability of that claim against the prior art." M.P.E.P. § 2143.03.

Independent claim 19 recites, in pertinent part,

- encrypting data to be sent to a destination edge node;
- generating a control burst, the control burst containing information to reserve network resources to form a virtual lightpath between the source edge node and the destination edge node during a scheduled timeslot, the virtual lightpath including at least one lightpath segment;
- adding information to the control burst indicating whether or not one or more data bursts** to be sent from the source edge node to the destination edge node **will be encrypted**;
- sending the control burst** to a first hop along the virtual lightpath, the first hop comprising one of a switching node or the destination edge node;
- and
- sending said one or more data bursts** containing the data that is encrypted to the first hop along the virtual lightpath during the scheduled timeslot.

Applicants respectfully submit that the combination of Qiao and Biggs fails to disclose, teach, or suggest using a control burst (which is used to reserve network resources to form virtual lightpaths) to indicate whether or not a separate data burst will be encrypted.

While Qiao discloses optical burst switching including the use of control packets and data bursts, Qiao does not teach or suggest using the control packets to indicate whether or not one or more data bursts will be encrypted. In other words, Qiao does not

teach or suggest adding information into the control packets illustrated in FIG. 1 of Qiao to indicate whether associated data bursts are encrypted. In fact, Qiao makes no mention of encrypting the data bursts at all and includes no disclosure related to optical encryption.

The Office Action acknowledges “Qiao does not explicitly teach indicating whether or not one or more data bursts containing the data that are encrypted.” *Office Action* mailed 3/18/09, page 6. Consequently, the Office Action cites paragraphs [0014] and [0018]-[0020] of Biggs as teaching this missing element. However, Biggs discloses operation of a wireless network that is capable of air interface encryption between a cellular client and a cellular tower or end-to-end encryption between the cellular clients themselves. Biggs states,

**The present invention provides a first indicator to indicate whether end-to-end encryption is applied to at least a portion of the payload and a second indicator to indicate whether air interface encryption is applied to at least a portion of the payload in each over-the air burst (i.e., over-the-air fragment); thus, the first indicator and the second indicator are present at the same layer of the protocol stack (e.g., the link layer).** The receiving device uses the indicators to efficiently determine any decryption mechanism, if any, required to recover/process the received information/payload. **It should be noted that the present invention uses the term "fragment" and/or "burst" to describe the smallest standalone entity of the air interface.** In a time division multiple access ("TDMA") system, this may also be called a slot. (Biggs, para. [0014]. Emphasis added)

**FIGS. 2-5 illustrates examples of the structure of a burst 200 comprising the first indicator 202, the second indicator 204 and two fields of payload 206, 208** in accordance with the preferred embodiment of the present invention; FIG. 6 illustrates a flowchart of the operation of the receiving communication device 102 to determine the earliest point in time at which the receiving communication device 102 may process the received payload 206, 208. Some of the payload fields are capable of being protected with end-to-end encryption, while all of the fields are capable of being protected with air interface encryption. It should be noted that while FIGS. 2-5 illustrate two fields of payload 206, 208 in the burst 200, the burst 200 may contain any number of fields, including one, and still remain within the spirit and scope of the present invention. (Biggs, para. [0017]. Emphasis added)

These portions of Biggs disclose that both the first indication of whether end-to-end encryption is used and the second indication of whether air interface encryption is used

are positioned within the link layer of their protocol stack and these indications are embedded with **each burst** carrying the data payloads themselves. In other words, Biggs teaches placing the encryption indications within the data packets—not within control bursts separate from the data packets.

To be sure, referring to FIGs. 2-5, Biggs teaches that encryption indicators 202 and 204 are included within each burst (Biggs defines a “burst” as the smallest standalone entity of the air interface between a cell phone and a cell tower) carrying data payloads 206 and 208. Thus each of the four examples illustrated in FIGs. 2-5 and discussed in paragraph [0018]-[0021] of Biggs discloses that each individual data burst includes its own indication of how its payloads are encrypted (or not encrypted). Biggs does not teach or suggest placing encryption indicators 202 or 204 within a separate control burst (which control burst is used to reserve network resource) to indicate whether a separate data burst will be encrypted. In contrast, Biggs embeds indicators 202 and 204 within **every data burst** itself. Therefore, Biggs does not teach or suggest encryption in an optical network and certainly does not teach or suggest using a control burst (which are used to reserve network resources to form virtual lightpaths) to indicate whether or not a separate data burst will be encrypted.

Neither Qiao nor Biggs teach or suggest using a control burst to indicate whether or not a data burst is encrypted. Consequently, the combination of Qiao and Biggs fails to teach or suggest all elements of claim 19, as required under M.P.E.P. § 2143.03. Accordingly, Applicants request that the instant § 103(a) rejections of independent claim 19 be withdrawn.

#### **B. The Dependent Claims Are Nonobvious Over Qiao, Biggs, Townsend, Stringer, & McMillian**

Claims 20-21 and 25-26 stand under 35 U.S.C. § 103(a) as being unpatentable over Qiao in view of Biggs and Townsend et al. (US 5,850,441).

Claims 22-23 and 27 stand under 35 U.S.C. § 103(a) as being unpatentable over Qiao in view of Biggs, Townsend, and Stringer et al. (US 2003/0196087 A1).

Claim 24 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Qiao in view of Biggs, Townsend, and McMillian et al. (US 2004/0039925 A1).

Townsend fails to teach or suggest the very same elements of independent claim 19 discussed above. Rather, Townsend discloses the use of quantum cryptography for use with an optical ring network. However, Townsend fails to disclose use of control and data bursts, much less using control bursts to indicate whether or not a related data burst is encrypted. Stringer and McMillan also fail to cure the above identified deficiencies of Qiao and Biggs.

The dependent claims are nonobvious over the prior art of record for at least the same reasons as discussed above in connection with their respective independent claims, in addition to adding further limitations of their own. Accordingly, Applicants respectfully request that the instant § 103 rejections of the dependent claims be withdrawn.

### **CONCLUSION**

In view of the foregoing remarks, it is believed that the applicable rejections have been overcome and all claims remaining in the application are presently in condition for allowance. Accordingly, favorable consideration and a Notice of Allowance are earnestly solicited.

### **CHARGE DEPOSIT ACCOUNT**

Please charge our Deposit Account No. 02-2666 for any additional fee(s) that may be due in this matter, and please credit the same deposit account for any overpayments.

Respectfully submitted,

BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP

Date: May 7, 2009

/Cory G. Claassen/

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